

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A general charging method comprising steps of establishing a charging strategy and performing the charging based upon the charging strategy, wherein:

the charging strategy comprises a plurality of priorities each of which comprises a plurality of periods of time, and each of the periods of time corresponds to a type of rate segmentation and is provided a plurality of rate segments in each of which there are a plurality of rates;

the step of performing the charging comprises:

step 1: searching for the highest priority in the charging strategy;

step 2: searching for a corresponding period of time in the priority based upon the time a subscriber uses a service; if found, performing the charging based upon the rate segments in the period of time and going to step 4, otherwise going to step 3;

step 3: judging whether all the priorities have been searched through; if yes, going to step 5, otherwise searching for a next priority and going to step 2;

step 4: judging whether the charging has been completed; if completed, going to step 5, otherwise going to step 3; and

step 5: judging whether there is any usage quantity that can't be charged; if yes, recording it and terminating the charging, otherwise, terminating the charging.

2. (Original) The charging method of claim 1, wherein the types of rate segmentation comprise the type of resource-accumulative segmentation and the type of usage-quantity segmentation;

the type of resource-accumulative segmentation refers to segmentation of a certain resource, wherein the charging is performed through selection of a rate based upon a current value of the resource; and

the type of usage-quantity segmentation refers to segmentation of the usage quantity, wherein the charging is performed through selection of a rate based upon the once used quantity.

3. (Original) The charging method of claim 2, wherein the charging based upon the rate segments in step 2 further comprises steps of:

if the type of rate segmentation in the period of time, within which the time is, is the type of resource-accumulative segmentation, performing the charging based upon the resource-accumulative segmentation;

if the type of rate segmentation is the type of usage-quantity segmentation, performing the charging based upon the usage-quantity segmentation; and

if the charging can't be completed in the priority due to insufficient resource for the subscriber or a configuration error, going on the search for the next priority.

4. (Currently Amended) The charging method of claim 2 [[or3]], wherein the charging process based upon the type of resource-accumulative segmentation comprises steps of:

comparing a current value of the resource with a boundary value on the left and a boundary value on the right for each of the rate segments, i.e., judging whether the current value of the resource is not smaller than the boundary value on the left of the segment and smaller than the boundary value on the right of the segment or the current value of the resource is larger than the boundary value on the left of the segment and not larger than the boundary value on the right of the segment;

determining which one of the rate segments the current value of the resource is within;

performing the charging based upon the rates in the segment;

if the charging process makes the value of the resource go beyond either boundary of the segment, i.e., smaller than the boundary value on the left or larger than the boundary value on the right, truncating the boundary value, and going on the charging for the remaining value of the resource in another segment; and

taking the sum of the charges of all the respective segments as a total charge.

5. (Currently Amended) The charging method of claim [[2 or]] 3, wherein the charging process based upon the type of usage-quantity segmentation comprises steps of:

~~covering the respective rate segments based upon a value of the usage quantity;~~
~~selecting segments which are entirely or partially covered;~~
~~performing the charging based upon the respective rates in the rate segments; and~~
~~taking the sum of the charges of all the respective segments as a total charge~~
comparing a current value of the resource with a boundary value on the left and a boundary value on the right for each of the rate segments, i.e., judging whether the current value of the resource is not smaller than the boundary value on the left of the segment and smaller than the boundary value on the right of the segment or the current value of the resource is larger than the boundary value on the left of the segment and not larger than the boundary value on the right of the segment;

determining which one of the rate segments the current value of the resource is within;
performing the charging based upon the rates in the segment;

if the charging process makes the value of the resource go beyond either boundary of the segment, i.e., smaller than the boundary value on the left or larger than the boundary value on the right, truncating the boundary value, and going on the charging for the remaining value of the resource in another segment; and

taking the sum of the charges of all the respective segments as a total charge.

6. (New) The charging method of claim 2, wherein the charging process based upon the type of usage-quantity segmentation comprises steps of:

covering the respective rate segments based upon a value of the usage quantity;
selecting segments which are entirely or partially covered;
performing the charging based upon the respective rates in the rate segments; and
taking the sum of the charges of all the respective segments as a total charge.

7. (New) The charging method of claim 3, wherein the charging process based upon the type of usage-quantity segmentation comprises steps of:

covering the respective rate segments based upon a value of the usage quantity;
selecting segments which are entirely or partially covered;
performing the charging based upon the respective rates in the rate segments; and
taking the sum of the charges of all the respective segments as a total charge.